

**Annex 2F. Use of ODS Substitutes (IPCC 2F)**  
**to the Technical Support Document for the 2000-2012 California's Greenhouse Gas**  
**Emissions Inventory**

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**Variables Used in the Emissions Estimation Equations**

*Values last updated on Monday, March 24, 2014*

**IPCC category = 2F — Product Uses as Substitutes for Ozone Depleting Substances**

► **Sector = Not Specified Commercial >**

**Activity = Use of substitutes for ozone depleting substances - Aerosols - HFC-134a**

<b>- Variable Name -</b>	<b>- Year -</b>	<b>- Value and Units -</b>	<b>- Reference -</b>
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2000	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2001	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2002	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2003	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2004	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2005	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2006	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2007	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2008	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2009	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2010	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2011	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2012	Not used in estimates	None, see text

**Activity = Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes**

<b>- Variable Name -</b>	<b>- Year -</b>	<b>- Value and Units -</b>	<b>- Reference -</b>
Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes	2000	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes	2001	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes	2002	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes	2003	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes	2004	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes	2005	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes	2006	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes	2007	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes	2008	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes	2009	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes	2010	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes	2011	Not used in estimates	None, see text

## Variables Used in the Emissions Estimation Equations

Values last updated on Monday, March 24, 2014

Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes	2012	Not used in estimates	None, see text
<b>Activity = Use of substitutes for ozone depleting substances - Fire Protection - CF4</b>			
- Variable Name -	- Year -	- Value and Units -	- Reference -
Use of substitutes for ozone depleting substances - Fire Protection - CF4	2000	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - CF4	2001	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - CF4	2002	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - CF4	2003	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - CF4	2004	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - CF4	2005	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - CF4	2006	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - CF4	2007	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - CF4	2008	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - CF4	2009	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - CF4	2010	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - CF4	2011	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - CF4	2012	Not used in estimates	None, see text
<b>Activity = Use of substitutes for ozone depleting substances - Fire Protection - HFC-125</b>			
- Variable Name -	- Year -	- Value and Units -	- Reference -
Use of substitutes for ozone depleting substances - Fire Protection - HFC-125	2000	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - HFC-125	2001	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - HFC-125	2002	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - HFC-125	2003	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - HFC-125	2004	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - HFC-125	2005	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - HFC-125	2006	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - HFC-125	2007	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - HFC-125	2008	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - HFC-125	2009	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - HFC-125	2010	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - HFC-125	2011	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - HFC-125	2012	Not used in estimates	None, see text
<b>Activity = Use of substitutes for ozone depleting substances - Fire Protection - HFC-236fa</b>			
- Variable Name -	- Year -	- Value and Units -	- Reference -
Use of substitutes for ozone depleting substances - Fire Protection - HFC-236fa	2000	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - HFC-236fa	2001	Not used in estimates	None, see text

## Variables Used in the Emissions Estimation Equations

Values last updated on Monday, March 24, 2014

Use of substitutes for ozone depleting substances - Fire Protection - HFC-236fa	2002	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - HFC-236fa	2003	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - HFC-236fa	2004	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - HFC-236fa	2005	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - HFC-236fa	2006	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - HFC-236fa	2007	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - HFC-236fa	2008	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - HFC-236fa	2009	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - HFC-236fa	2010	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - HFC-236fa	2011	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - HFC-236fa	2012	Not used in estimates	None, see text

### Activity = Use of substitutes for ozone depleting substances - Fire Protection - Other ODS substitutes

- Variable Name -	- Year -	- Value and Units -	- Reference -
Use of substitutes for ozone depleting substances - Fire Protection - Other ODS substitutes	2000	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - Other ODS substitutes	2001	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - Other ODS substitutes	2002	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - Other ODS substitutes	2003	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - Other ODS substitutes	2004	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - Other ODS substitutes	2005	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - Other ODS substitutes	2006	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - Other ODS substitutes	2007	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - Other ODS substitutes	2008	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - Other ODS substitutes	2009	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - Other ODS substitutes	2010	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - Other ODS substitutes	2011	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - Other ODS substitutes	2012	Not used in estimates	None, see text

### Activity = Use of substitutes for ozone depleting substances - Foams - HFC-134a

- Variable Name -	- Year -	- Value and Units -	- Reference -
Use of substitutes for ozone depleting substances - Foams - HFC-134a	2000	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - HFC-134a	2001	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - HFC-134a	2002	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - HFC-134a	2003	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - HFC-134a	2004	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - HFC-134a	2005	Not used in estimates	None, see text

## Variables Used in the Emissions Estimation Equations

Values last updated on Monday, March 24, 2014

Use of substitutes for ozone depleting substances - Foams - HFC-134a	2006	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - HFC-134a	2007	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - HFC-134a	2008	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - HFC-134a	2009	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - HFC-134a	2010	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - HFC-134a	2011	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - HFC-134a	2012	Not used in estimates	None, see text

### Activity = Use of substitutes for ozone depleting substances - Foams - Other ODS substitutes

- Variable Name -	- Year -	- Value and Units -	- Reference -
Use of substitutes for ozone depleting substances - Foams - Other ODS substitutes	2000	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - Other ODS substitutes	2001	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - Other ODS substitutes	2002	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - Other ODS substitutes	2003	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - Other ODS substitutes	2004	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - Other ODS substitutes	2005	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - Other ODS substitutes	2006	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - Other ODS substitutes	2007	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - Other ODS substitutes	2008	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - Other ODS substitutes	2009	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - Other ODS substitutes	2010	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - Other ODS substitutes	2011	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - Other ODS substitutes	2012	Not used in estimates	None, see text

### Activity = Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-125

- Variable Name -	- Year -	- Value and Units -	- Reference -
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-125	2000	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-125	2001	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-125	2002	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-125	2003	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-125	2004	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-125	2005	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-125	2006	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-125	2007	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-125	2008	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-125	2009	Not used in estimates	None, see text





## Variables Used in the Emissions Estimation Equations

Values last updated on Monday, March 24, 2014

Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - Other ODS substitutes	2002	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - Other ODS substitutes	2003	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - Other ODS substitutes	2004	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - Other ODS substitutes	2005	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - Other ODS substitutes	2006	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - Other ODS substitutes	2007	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - Other ODS substitutes	2008	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - Other ODS substitutes	2009	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - Other ODS substitutes	2010	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - Other ODS substitutes	2011	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - Other ODS substitutes	2012	Not used in estimates	None, see text

### ► Sector = Not Specified Industrial >

#### Activity = Use of substitutes for ozone depleting substances - Aerosols - HFC-134a

- Variable Name -	- Year -	- Value and Units -	- Reference -
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2000	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2001	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2002	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2003	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2004	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2005	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2006	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2007	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2008	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2009	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2010	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2011	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2012	Not used in estimates	None, see text

#### Activity = Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes

- Variable Name -	- Year -	- Value and Units -	- Reference -
Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes	2000	Not used in estimates	None, see text

## Variables Used in the Emissions Estimation Equations

Values last updated on Monday, March 24, 2014

Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes	2001	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes	2002	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes	2003	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes	2004	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes	2005	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes	2006	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes	2007	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes	2008	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes	2009	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes	2010	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes	2011	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes	2012	Not used in estimates	None, see text

### Activity = Use of substitutes for ozone depleting substances - Fire Protection - CF4

- Variable Name -	- Year -	- Value and Units -	- Reference -
Use of substitutes for ozone depleting substances - Fire Protection - CF4	2000	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - CF4	2001	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - CF4	2002	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - CF4	2003	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - CF4	2004	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - CF4	2005	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - CF4	2006	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - CF4	2007	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - CF4	2008	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - CF4	2009	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - CF4	2010	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - CF4	2011	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - CF4	2012	Not used in estimates	None, see text

### Activity = Use of substitutes for ozone depleting substances - Fire Protection - HFC-125

- Variable Name -	- Year -	- Value and Units -	- Reference -
Use of substitutes for ozone depleting substances - Fire Protection - HFC-125	2000	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - HFC-125	2001	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - HFC-125	2002	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - HFC-125	2003	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - HFC-125	2004	Not used in estimates	None, see text



## Variables Used in the Emissions Estimation Equations

Values last updated on Monday, March 24, 2014

Use of substitutes for ozone depleting substances - Fire Protection - Other ODS substitutes	2009	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - Other ODS substitutes	2010	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - Other ODS substitutes	2011	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Fire Protection - Other ODS substitutes	2012	Not used in estimates	None, see text

### Activity = Use of substitutes for ozone depleting substances - Foams - HFC-134a

- Variable Name -	- Year -	- Value and Units -	- Reference -
Use of substitutes for ozone depleting substances - Foams - HFC-134a	2000	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - HFC-134a	2001	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - HFC-134a	2002	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - HFC-134a	2003	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - HFC-134a	2004	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - HFC-134a	2005	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - HFC-134a	2006	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - HFC-134a	2007	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - HFC-134a	2008	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - HFC-134a	2009	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - HFC-134a	2010	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - HFC-134a	2011	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - HFC-134a	2012	Not used in estimates	None, see text

### Activity = Use of substitutes for ozone depleting substances - Foams - Other ODS substitutes

- Variable Name -	- Year -	- Value and Units -	- Reference -
Use of substitutes for ozone depleting substances - Foams - Other ODS substitutes	2000	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - Other ODS substitutes	2001	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - Other ODS substitutes	2002	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - Other ODS substitutes	2003	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - Other ODS substitutes	2004	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - Other ODS substitutes	2005	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - Other ODS substitutes	2006	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - Other ODS substitutes	2007	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - Other ODS substitutes	2008	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - Other ODS substitutes	2009	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - Other ODS substitutes	2010	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - Other ODS substitutes	2011	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - Other ODS substitutes	2012	Not used in estimates	None, see text





## Variables Used in the Emissions Estimation Equations

Values last updated on Monday, March 24, 2014

Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-32	2007	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-32	2008	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-32	2009	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-32	2010	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-32	2011	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-32	2012	Not used in estimates	None, see text

### Activity = Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - Other ODS substitutes

- Variable Name -	- Year -	- Value and Units -	- Reference -
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - Other ODS substitutes	2000	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - Other ODS substitutes	2001	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - Other ODS substitutes	2002	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - Other ODS substitutes	2003	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - Other ODS substitutes	2004	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - Other ODS substitutes	2005	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - Other ODS substitutes	2006	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - Other ODS substitutes	2007	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - Other ODS substitutes	2008	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - Other ODS substitutes	2009	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - Other ODS substitutes	2010	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - Other ODS substitutes	2011	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - Other ODS substitutes	2012	Not used in estimates	None, see text

### Activity = Use of substitutes for ozone depleting substances - Solvents - CF4

- Variable Name -	- Year -	- Value and Units -	- Reference -
Use of substitutes for ozone depleting substances - Solvents - CF4	2000	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Solvents - CF4	2001	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Solvents - CF4	2002	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Solvents - CF4	2003	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Solvents - CF4	2004	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Solvents - CF4	2005	Not used in estimates	None, see text

## Variables Used in the Emissions Estimation Equations

Values last updated on Monday, March 24, 2014

Use of substitutes for ozone depleting substances - Solvents - CF4	2006	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Solvents - CF4	2007	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Solvents - CF4	2008	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Solvents - CF4	2009	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Solvents - CF4	2010	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Solvents - CF4	2011	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Solvents - CF4	2012	Not used in estimates	None, see text

### Activity = Use of substitutes for ozone depleting substances - Solvents - Other ODS substitutes

- Variable Name -	- Year -	- Value and Units -	- Reference -
Use of substitutes for ozone depleting substances - Solvents - Other ODS substitutes	2000	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Solvents - Other ODS substitutes	2001	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Solvents - Other ODS substitutes	2002	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Solvents - Other ODS substitutes	2003	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Solvents - Other ODS substitutes	2004	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Solvents - Other ODS substitutes	2005	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Solvents - Other ODS substitutes	2006	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Solvents - Other ODS substitutes	2007	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Solvents - Other ODS substitutes	2008	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Solvents - Other ODS substitutes	2009	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Solvents - Other ODS substitutes	2010	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Solvents - Other ODS substitutes	2011	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Solvents - Other ODS substitutes	2012	Not used in estimates	None, see text

### ► Sector = Not Specified Residential >

### Activity = Use of substitutes for ozone depleting substances - Aerosols - HFC-134a

- Variable Name -	- Year -	- Value and Units -	- Reference -
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2000	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2001	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2002	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2003	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2004	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2005	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2006	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2007	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2008	Not used in estimates	None, see text

## Variables Used in the Emissions Estimation Equations

Values last updated on Monday, March 24, 2014

Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2009	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2010	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2011	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2012	Not used in estimates	None, see text

### Activity = Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes

- Variable Name -	- Year -	- Value and Units -	- Reference -
Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes	2000	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes	2001	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes	2002	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes	2003	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes	2004	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes	2005	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes	2006	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes	2007	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes	2008	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes	2009	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes	2010	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes	2011	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - Other ODS substitutes	2012	Not used in estimates	None, see text

### Activity = Use of substitutes for ozone depleting substances - Foams - HFC-134a

- Variable Name -	- Year -	- Value and Units -	- Reference -
Use of substitutes for ozone depleting substances - Foams - HFC-134a	2000	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - HFC-134a	2001	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - HFC-134a	2002	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - HFC-134a	2003	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - HFC-134a	2004	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - HFC-134a	2005	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - HFC-134a	2006	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - HFC-134a	2007	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - HFC-134a	2008	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - HFC-134a	2009	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - HFC-134a	2010	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - HFC-134a	2011	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Foams - HFC-134a	2012	Not used in estimates	None, see text



## Variables Used in the Emissions Estimation Equations

Values last updated on Monday, March 24, 2014

Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-134a	2003	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-134a	2004	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-134a	2005	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-134a	2006	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-134a	2007	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-134a	2008	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-134a	2009	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-134a	2010	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-134a	2011	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-134a	2012	Not used in estimates	None, see text

### Activity = Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-32

- Variable Name -	- Year -	- Value and Units -	- Reference -
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-32	2000	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-32	2001	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-32	2002	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-32	2003	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-32	2004	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-32	2005	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-32	2006	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-32	2007	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-32	2008	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-32	2009	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-32	2010	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-32	2011	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Refrigeration and Air Conditioning - HFC-32	2012	Not used in estimates	None, see text

### ► Sector = Not Specified Transportation >

### Activity = Use of substitutes for ozone depleting substances - Aerosols - HFC-134a

- Variable Name -	- Year -	- Value and Units -	- Reference -
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2000	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2001	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2002	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2003	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2004	Not used in estimates	None, see text
Use of substitutes for ozone depleting substances - Aerosols - HFC-134a	2005	Not used in estimates	None, see text





